

LATERALLY SUPPORTED HANDLE WAFER FOR THROUGH-WAFER REACTIVE-ION ETCH MICROMACHINING

ABSTRACT OF THE DISCLOSURE

A method of handling a wafer for through-wafer plasma etching includes lateral support provided between a handle wafer and a product wafer without wafer bonding or an adhesive film using mating mechanical structures. The product wafer is easily separated from the handle wafer following etching without stripping or cleaning. Because the connection between the wafers is mechanical, not from an adhesive layer/bonded layer, a wafer can be etched, inspected, and subsequently continue to be etched without the hindrance of repeated bonding, separation, and cleaning. A non-bonded support for released devices following a through-etch process is also provided.

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